## UNDESCRIBED SPECIES AND NOTES ON OTHER

## PLANTS FROM MIDDLE AMERICA

## Cyrus Longworth Lundell

PETENAEA CORDATA Lundell, Wrightia 3: 24. 1962.

GUATEMALA: Dept. Peten, Machaquila, km. 91 of road, in clearing, Oct. 20, 1966, Elias Contreras 6457 (LL), 6459 (LL), shrub, 15 ft. high, flowers red-carmine. BRITISH HONDURAS: El Cayo District, Fall del Carnero, Rio Mopan, Oct. 11, 1967, Contreras 7104 (LL), shrub, fruit red-purple; Benque Viejo, in low forest bordering Rio Mopan, Oct. 21, 1967, Contreras 7159 (LL), shrub, 20 ft., flowers red-carmine.

The species has been known only from the type locality along the north shore of Lake Peten Itza where it grows on the gypsum escarpment. These notable extensions of range further attest to

the need for much more intensive collecting in the region.

XYLOSMA CHIAPENSE Lundell, sp. nov. - Arbor parva, armata; ramulis minute puberulis; folia petiolata, petiolo 3-4 mm. longo; lamina chartacea, lanceolata, 4-8 cm. longa, 1.5-3 cm. lata, basi obtusa vel rotundata, apice caudato-acuminata, minute serrulata, reticulata; flores dioeci, racemis dense puberulis, subsessilibus; pedicelli puberuli, 2.5-6 mm. longi; sepala lanceolato-oblonga, usque ad 3 mm. longa, glabra; ovarium glabrum; stylus 3-fidus.

MEXICO: Chiapas, Siltepec, Aug. 6, 1937, Eizi Matuda S-199

(LL, type), small tree.

The type is from a pistillate plant, and the raceme is abbreviated. The lanceolate, caudate-acuminate finely serrulate leaves puberulent above along the midrib are distinctive.

A staminate collection, D. E. Breedlove 15300 (LL) from Chiapas, appears to be referable here. The racemes of this staminate collection are up to 9 mm. long. The relationship of X. chiapense appears to be with X. quichense Donn. Sm. of Guatemala.

CALYPTRANTHES CONTRERASII Lundell, Wrightia 2: 205. 1961. GUATEMALA: Dept. Peten, Seamay, in high forest on top of rocky hill, March 11, 1967, Elias Contreras 6716 (LL), small tree, 20 ft. high, 4 in. diam., fruits black-purple.

This is the second collection from Peten. The black-purple mature fruits are subglobose, up to 1 cm. in diameter when dry. CALYPTRANTHES PETENENSIS Lundell, sp. nov. — Arbor parva, ramulis subteretibus, glabratis; folia petiolis 3.5—5 mm. longis stipitata; lamina oblongo-lanceolata vel oblanceolata, 5.5—7.5 cm. longa, 1.8—2.7 cm. lata, basi acuta, apice caudato-acuminata, chartacea, glabra, nervo medio supra versus basin canaliculato; inflorescentiae 1.3—3.5 cm. longae, 1—7-florae; pedunculi filiformes, ad 2 cm. longi; flores non vidi; fructus subglobosi.

GUATEMALA: Dept. Peten, La Esperanza, km. 140 of Cadenas Road, in low forest on top of rocky hill, east, Nov. 2, 1966, Elias Contreras 6499 (LL, type), small tree, 20 ft. high, 2 in. diam.

With affinity to <u>C. paxillata</u> McVaugh, the wing-angled branchlets and smaller flowers with calyptra about 2 mm. in diameter distinguish <u>C. petenensis</u>. A few appressed coppery hairs persist at tips of branchlets and on the inflorescences, but the plants are essentially glabrous in the fruiting stage.

EUGENIA AXILLARIS (Sw.) Willd. var. COZUMELENSIS (Lundell) Lundell, comb. nov. Eugenia cozumelensis Lundell, Wrightia 3: 13. 1961.

MEXICO: Quintana Roo, Cozumel Island, in forest, San Miguel, Aug. 6-8, 1932, W. C. Steere 2640 (LL, type). GUATEMALA: Dept. Peten, Macanche, between the lake and milpa, in low forest, May 20, 1966, Elias Contreras 5811 (LL), small tree, 35 ft. high, 4 in. diam., "guayabillo."

This pubescent form of  $\underline{E}$ .  $\underline{axillaris}$  is worthy of varietal status. In the Yucatan Peninsula, it has not been found before

except on Cozumel Island.

EUGENIA ELIASII Lundell, sp. nov. — Arbor parva, ll-metralis, subglabra, ramulis crassis; folia glabra, petiolis usque ad 10 mm. longis stipitata; lamina elliptica vel obovato-elliptica, 6.5-11.5 cm. longa, 4-8 cm. lata, apice rotundata vel emarginata, basi subrotundata, coriacea; racemi abbreviati, usque ad 1 cm. longi; pedicelli fructiferi crassi, l-1.5 cm. longi; calycis lobi rotundati, intus strigosi, majores 4 mm. longi; discus ca. 4 mm. latus; fructus subglobosi, diametro l-1.5 cm.

GUATEMALA: Dept. Peten, Cadenas, on la Pedrera, on top of rocky hill, March 24, 1967, Elias Contreras 6838 (LL, type), small tree, 35 ft. high, 4 in. diameter, fruits dark red.

The thick leaves with inconspicuous venation are suggestive of those of several local species of <u>Clusia</u>. Although resembling a <u>Psidium</u>, the abbreviated racemes and unequal paired calyx lobes are characteristics of <u>Eugenia</u>.

EUGENIA LAUGHLINII Lundell, sp. nov. — Frutex, 3 m.; ramulis novellis minute peradpresse albo-pubescentibus; folia petiolata, petiolo 5-7 mm. longo; lamina subcoriacea, anguste oblanceolato-elliptica vel lanceolata, 4.5-7.5 cm. longa, 2-3 cm. lata, basi acuta, apice obtuse acuminata, subtus albido-cinerea, nervis lateralibus inconspicuis; racemi 3-15 mm. longi, albido-

canescenti, pauciflori; pedicelli 2-4 mm. longi; bracteolae distinctae, parvae, ovatae, 0.6-0.9 mm. longae; calycis lobi concavi, inaequales, majores 3 mm. longi rotundati; petala glabra, ciliata.

MEXICO: Chiapas, Municipio of Zinacantan, shrubby slope along Mexico 190 at Paraje Granadilla, elev. 4500 feet, June 15, 1966,

Robert M. Laughlin 1070 (LL, type), shrub 10 feet tall.

Related to E. argyrea Lundell, the species may be recognized at once by its distinctive whitish indument consisting of minute closely appressed dibrachiate hairs. The indument of the undersurface of the leaves is persistent, the upper surface becomes yellow-green and glabrous with age. Only flower buds are available, and these, like all the inflorescences, are covered with the same minute indument of the leaves and twigs.

EUGENIA PERCIVALII Lundell, Wrightia 2: 124. 1961.
GUATEMALA: Dept. Peten, La Cumbre, in high forest on rocky
hill, west of km. 140 of Cadenas Road, Sept. 21, 1966, Elias
Contreras 6187 (LL), small tree about 30 ft. high, 4 in. diam.,
"guayabillo"; Seamay, bordering Santa Isabel River, in low
forest, west, Mar. 8, 1967, Contreras 6684 (LL), shrub, 25 ft.
high, 3 in. diam., fruits reddish-yellow.

The species has been known only from the type which was collected in the same forest on the British Honduras side of the border, Percy H. Gentle 7332 (LL). The Peten specimens are in fruit, and the large subglobose stipitate fruits measure up to 2.2 cm. in diameter. The leaves in the Contreras collections are thinner and mostly larger than in the type.

EUGENIA RUBELLA Lundell, Wrightia 3: 18. 1961.

GUATEMALA: Dept. Peten, Dolores, about 2 km. southeast of the village, on Rio Mopan trail, in high forest, June 29, 1961, Elias Contreras 2559 (LL, type), small tree, 2 in. diam., 10 ft. high; La Cumbre, on top of rocky hill, west of km. 139 of Cadenas Road, Sept. 23, 1966, Contreras 6200 (LL), shrub, 15 ft. high, fruits greenish, "guayabillo"; Seamay, on top of rocky hill, low forest, March 6, 1967, Contreras 6665 (LL), shrub, 25 ft. high, 3 in. diam., "guayabillo."

Known heretofore only from the type, two additional collections from the rain forest of southeastern Peten appear to be referable to the species. The specimens, in the early fruiting stage, have a distinctly racemose inflorescence with the raceme-

axis up to 1 cm. long, and pedicels up to 5 mm. long.

Although appearing to be closely related to  $\underline{E}$  origanoides Berg, the inflorescence is distinctive, and I doubt that the populations are of hybrid origin, as surmised by McVaugh (Fieldiana: Bot. 24: 357. 1963).

EUGENIA SHOOKII Lundell, Wrightia 2: 209. 1961.

GUATEMALA: Dept. Peten, La Cumbre, in high forest, west of km. 140 of the Cadenas Road, Sept. 21, 1966, Elias Contreras 6180 (LL), tree, 40 ft. high, 4 in. diam., fruits yellow-green; same locality, Sept. 28, 1966, Contreras 6267 (LL), tree, 35 ft. high, 5 in. diam., fruits yellow-green.

The species has been known heretofore only from the type locality near Dolores at km. 85 of the Flores-Poptun Road, where it is represented by 1961-1962 collections as follows: Contreras 2629 (LL, type), 2647 (LL), 2934A (LL), 2944 (LL); C. L. Lundell

17314 (LL).

In Contreras 6180 some of the oblong fruits exceed 2 cm. in length and have a curved sausage-like appearance.

HAUYA HEYDEANA Donn. Sm., Bot. Gaz. 18: 3. 1893. GUATEMALA: Dept. Peten, bordering savanna in high forest, km. 65/66 of Poptun Road, Nov. 20, 1967, Elias Contreras 7232 (LL),

7234 (LL), shrub, 18 ft. high, 4 in. diam., flowers white. MEXICO: Chiapas, in advanced forest on limestone, Trapichito, near Comitan, alt. 1350 m., June 2, 1945, Eizi Matuda 5754 (LL), tree, 4-5 m. high, flowers reddish-white.

The genus Hauya is new to Peten, and the species evidently has not been reported from Mexico.

HAUYA LUNDELLII Standl., Field Mus. Bot. 17: 204. 1937. GUATEMALA: Dept. Peten, east of km. 158, Cadenas Road, in low forest on top of rocky hill, Nov. 10, 1966, Elias Contreras 6567 (LL), tree, 5 in. diam., 25 ft. high.

In fruit, the thick capsules are 4-5 cm. long. Known before only from the type collected nearby in British Honduras, this

appears to be a rare species.

ACHRAS BREVILOBA (Gilly) Lundell, comb. nov. Manilkara

breviloba Gilly, Tropical Woods 73: 19. 1943.

With clarification by William T. Stearn (Taxon 16: 382. 1967) of the status of the genus Achras, my transfer to this genus of the species in Middle America, described under Manilkara, reflects my conviction that Linneaus's genus should be retained for the sapodilla complex in the Americas.

ACHRAS CALDERONII (Gilly) Lundell, comb. nov. Manilkara Calderonii Gilly, Tropical Woods 73: 18. 1943.

ACHRAS CONZATTII (Gilly) Lundell, comb. nov. Manilkara Conzattii Gilly, Tropical Woods 73: 18. 1943.

ACHRAS GAUMERI (Gilly) Lundell, comb. nov. Manilkara Gaumeri Gilly, Tropical Woods 73: 19. 1943.

ACHRAS MERIDIONALIS (Gilly) Lundell, comb. nov. Manilkara meridionalis Gilly, Tropical Woods 73: 12. 1943.

ACHRAS ROJASII (Gilly) Lundell, comb. nov. Manilkara Rojasii Gilly, Tropical Woods 73: 11. 1943.

ACHRAS STAMINODELLA (Gilly) Lundell, comb. nov. Manilkara staminodella Gilly, Tropical Woods 73: 10. 1943.

ACHRAS STRIATA (Gilly) Lundell, comb. nov. Manilkara striata Gilly, Tropical Woods 73: 11. 1943.

ACHRAS TABOGAENSIS (Gilly) Lundell, comb. nov. Manilkara tabogaensis Gilly, Tropical Woods 73: 10. 1943.

MATELEA TIKALANA Lundell, sp. nov. — Suffrutex scandens, caulibus gracilibus teretibus parce puberulis; folia elliptica vel lanceolato-elliptica, 11-15 cm. longa, 5-8 cm. lata, apice acuta vel subacuminata, basi anguste subcordata et levissime auriculata, membranacea, supra glabra, basi parce puberula, petiolo 2-4.5 cm. longo, parce puberulo; inflorescentia axillaris pauciflora, pedunculo subnullo, pedicellis 4-11 mm. longis, minute puberulis; calyx ad basin partitus, lobis lanceolatis acuminatis 4 mm. longis, sparse puberulis; corolla alba ca. 1.7 cm. lata, glabra, lobis lanceolatis, ca. 8 mm. longis, 4 mm. latis, acuminatis.

GUATEMALA: Dept. Peten, Tikal National Park, Tikal, in ramonal bordering hotel, March 20, 1959, <u>C. L. Lundell 15763</u> (LL, type), vine, flowers white; Tikal National Park, Remate Road, in second growth of roadside, Jan. 15, 1962, <u>Lundell 17103</u> (LL), slender vine, flowers greenish.

The species is of unknown affinity and possibly referable to  $\underline{\text{Marsdenia}}$  rather than  $\underline{\text{Matelea}}$ . It has been studied by Dr. Louis  $\overline{\text{O. Williams}}$ , and publication at this time is desirable for inclusion in the  $\underline{\text{Flora}}$  of Guatemala.